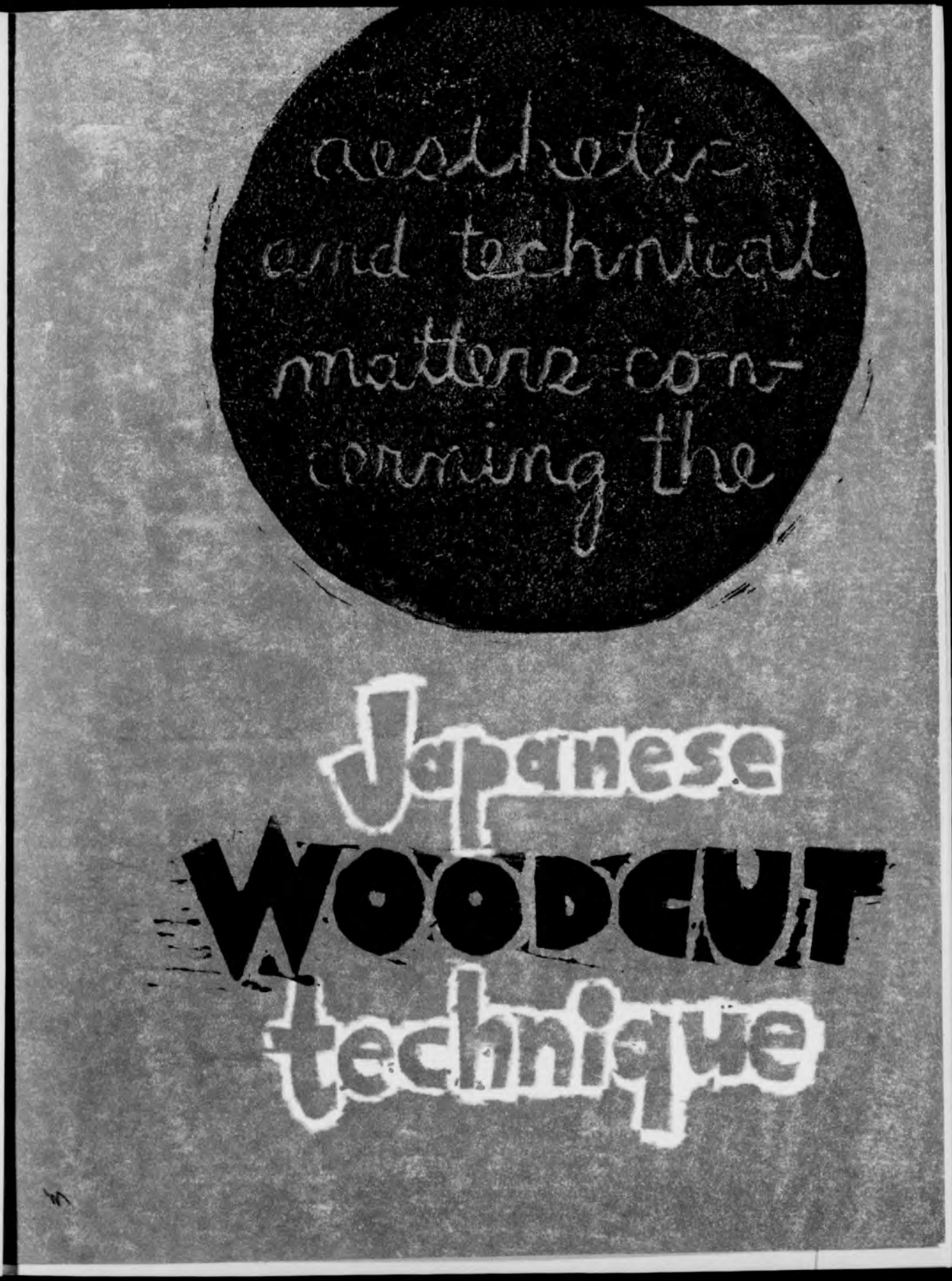
aesthetic
and technical
matters con-
cerning the
Japanese
WOODCUT
technique

AESTHETIC AND TECHNICAL MATTERS CONCERNING THE JAPANESE WOODCUT TECHNIQUE

by
Virginia Ingram

A Thesis Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Master of Fine Arts

April, 1965

Approved by

Helen Darrah
Director

APPROVAL SHEET

This thesis (dissertation) has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Helen Durnsh
Thesis Director

Oral Examination
Committee Members

L. C. Wright

Gilbert K Campbell

W Brady Wilson

April 5, 1965
Date of Examination

INGRAM, VIRGINIA S. Aesthetic and Technical Matters Concerning the Japanese Woodcut Technique. (1965) Directed by: Miss Helen Thrush. pp. 17

The making of a woodcut is the combination of many activities using a variety of materials, thereby creating new forms or images and thus uniting the forces of nature with those of man. The character of the wood, pigment and paper all influence the final work.

There are two generally accepted methods of making a woodcut, the European and the Japanese. The Japanese technique is the one described in this paper.

In the Japanese method, a water base paint is applied to the wood block with rather stiff flat-bottomed brushes. The impression is made from the block to the paper by rubbing a baren over the back of the print.

The designing and cutting - with the traditional knives, chisels, and gouges - pose no problems of technique. The printing process, however, presents many technical complications.

In the true Japanese technique, the paper must be sized. Before printing it is dampened for several hours between blotters.

In this project, I worked mostly with Ponderosa pine and plywood. Experimentation came mostly with the printing process.

Several kinds of paint were tried, but Shiva Nu-tempera and Winsor and Newton's Designers' gouache proved most satisfactory.

In addition to the traditional Japanese papers, I found several other papers, such as etching and watercolor papers, desirable for different experimental effects.

There are many innovations that can be utilized along with the woodcut to produce interesting and meaningful results. Among those used in this project were

cardboard stencils and dried oil base ink on blocks, which resulted in unusual textural effects.

As every new wood block is cut and printed, each one brings a new discovery. One asks if the long and tedious process of cutting and printing is worth it in the final results. The combination of activities that go into the making of a woodcut and the creation of a unity of forms seems to me symbolic of all life.

But the woodcut does not originate with the carving or with the preliminary drawing. It originates deep in the unconscious mind and only becomes conscious as the artist lives, looks, sees, and feels.

The scientist has shown to us through the microscope the heart of matter. Space exploration is expanding our knowledge of our universe. And this does not dwarf the discoveries that man is making within himself.

Much of the human mind lies dormant. It is up to the artist to quicken a stimulus in the mind of man.

Art is an attempt to grasp a part of this time and space and present it in a formal statement. It is time and space as we know it, as we see it, and as we feel it. It is of yesterday, today and tomorrow.

Forms in all space. A unity of all forms. That is what I imagine. That is what I desire to portray.

I would like to acknowledge with grateful appreciation the interest and invaluable guidance of Miss Helen Thrush, who introduced me to the woodcut medium and encouraged me to experiment with the Japanese technique.

LIST OF ILLUSTRATIONS

The making of a woodcut is the combination of many activities. You might say it involves some sculpturing and in a sense some painting. But the combination of all the activities make it a thoroughly exciting medium in which to work.

The physical activity involved in making a woodcut is important and it is derived directly from the use of materials peculiar to the woodcut.

What can be more exciting than to take a piece of wood, its form shaped by its existence of yesterday and today and cut into its surface, thereby creating a new form or image, thus uniting the forces of nature with those of man. Sometimes it is the grain of the wood that guides the artist's hand. Sometimes the artist imposes his own line on the wood and cuts away. Very often the hand is guided by the unconscious mind telling the conscious mind where to cut. No matter how it gets there it begins a statement. The printing brings the final say.

Pigments, whether they are of vegetable or mineral substances, are of every expressive quality. The printing paper plays as important a role as anything else. For there the variety in textures, the degree of absorbency, the degree of dampness, all enter into the imaginative detail of making a print, and all show up in the final results.

There are two generally accepted methods of making a woodcut, one in the European method and the other, the Japanese. The European method consists of applying an oil base ink to the wood block by means of a roller. The impression of the cut from the block to the paper is made by rubbing with the back of a spoon or with a press.

The Japanese technique is the one in which I am most interested and will discuss in more detail.

The cutting tools are generally the same whether using the European or Japanese technique. These include knives, chisels, and gouges. (Figure 1). The most important thing to be remembered about tools is keeping them properly sharpened, which is no easy job. These tools are the traditional ones, however, today there are printmakers using electric powered tools.

In the Japanese method, a water base paint is applied to the wood block with rather stiff flat-bottomed brushes. (Figure 2 and 3). The impression is made from the block to the paper by rubbing a baren over the back of the print. A baren is a disk of coiled tightly-plaited bamboo covered with a large bamboo leaf, which is folded so that the ends are tied together to form a handle on the back. (Figures 4 and 5).

This technique was at its height several hundred years ago, and it is not hard to understand why the early artists divided the process into four parts with a different person responsible for the designing, cutting, printing, and selling and distributing. While the designing and cutting pose no problem as far as technique is concerned, the printing process poses severe technical difficulties. First, in following the true Japanese technique, the paper is sized before using to insure evenness of color and also to make it tough enough to withstand the rubbing of the baren. I have always used a solution of gelatin and water (two small packages of Knox Gelatin to one quart of water) which is brushed on with a four-inch paint brush. The sizing is applied to the front side of paper first. For thinner paper, the amount of gelatin is increased. After sizing is applied, the paper is hung to dry.

In using the true Japanese technique, the paper must be dampened before

used. This requires two large pieces of plate glass and several white blotters the same size. A blotter is dampened and placed on the glass followed by at least three sheets of the printing paper. These are dampened individually with a large brush and are checked very carefully to see that no wrinkles exist. Another blotter is placed on the paper and the same process is followed until all paper is dampened. Another sheet of plate glass is placed on top to insure flatness. Six hours or overnight is a good average time to insure even dampness. When printing, care must be taken in order that the paper remains damp, and usually the prints have to be returned to the blotters until all colors are printed.

The question arises if all the trouble and worry described here is worth it in the final results of a print. The answer is an unequivocally positive one, for one can't help but become fascinated by the way the colors are absorbed directly into the fabric of the paper, thus giving a certain vibration and leaving the surface of the paper free which is not so obvious when oil base inks are used.

There have been problems encountered in this technique. The paint has to be just the right consistency. It is better to build up with thin washes, for if the paint is too thick, it will cause the paper to stick to the block and tear. I can only surmise at the causes of some problems, as when all the paper stuck together in the dampening process. I only reasoned that my sizing solution was too thick that particular time.

In making color prints, there has to be some means of registration. The Japanese used kento marks cut into the wood at the lower right and left hand corners of the block. These were slight indentions that the paper was slipped into. This method was not satisfactory for me so I arranged two strips of wood at right angles with two more strips one inch less in width on top. The wood block is then placed into the inner angle and the paper is placed into the outer angle, thus allowing a one-inch

margin to exist on the top and side of the print.

After I thought I had the technique under control, I decided to experiment and veer off course a bit. Most of the experimenting comes in the printing process, for generally I used the same types of wood throughout. In the past I have tried various types of wood, including pine, maple, oak, cedar, or any kind of scrap wood big enough to cut. For this project, however, I have worked mostly with Ponderosa pine and some crude plywood.

Several kinds of paint were tried in printing, such as tempera in jars, water base printer's ink, watercolor and casein. While I like the casein for some things, I have found the most satisfactory paint to be Shiva Nu-tempera and Winsor and Newton's Designers' gouache. The gouache is really more to be desired because of its very rich and intense color quality.

The experimentation and use of various kinds of paper was enlightening and most exciting. Previously, I had limited myself mostly to the use of such Japanese papers as sized Hosho and Torinoko. Hosho is a soft, absorbent paper while Torinoko has a smoother surface and is not so absorbent. For repeated color printings, these papers almost have to be sized and dampened, but I did find that in certain instances, when color is used sparingly, that a very fine effect can be obtained by using the paper unsized and undampened. The paint is not absorbed to the same degree as when damp and you achieve a more sparkling effect from the paper that shows through.

Both of these papers have a fairly smooth surface, but sometimes you feel a particular block calls for a paper with more texture. And thus it was discovered that papers such as Copperplate, Arches, Fabriano, Rives, and Whatman work beautifully for printmaking. It all behaves much better when dampened for several hours

between glass.

While I tried using some much thinner Japanese papers, the results were not successful for the particular blocks I was printing from. I can see some very definite advantages in using a very transparent paper at times. Also, there are many more papers that I had to forego using in lieu of time and also I am certain there are many unknown to me that I shall hope to discover someday.

In the printmaking medium, there are many innovations that can be utilized along with the woodcut to produce interesting and meaningful effects. I shall endeavor to explain a few which I used.

In order to achieve a somewhat fluid yet misty effect, I used cardboard cut out in previously determined shapes and glued to a piece of stencil paper. When the wood block was inked and the printing paper was placed on top of it, I then placed the cardboard stencil on top of the paper. Then the baren was used to rub the impression onto the paper. The cardboard made the paint adhere darker around the edges, but kept the paint from printing around the contour. With practice one can achieve the desired consistency for an edition of prints.

The same principle was used in combining cardboard, string, and sandpaper to produce a steady yet changing effect that was desired for one print.

Another interesting way of providing textures is to apply heavy oil base ink to the desired portion of the wood block with a textured roller. This is allowed to dry and then can be inked along with the rest of the block. When oil ink is still wet, it can be drawn on with a blunt pencil, palette knife, or anything, depending on desired width of line. (Figure 6).

As every new wood block is cut and printed, each one brings a new discovery. One asks why this is particularly true of the woodcut and not another medium. This

can be true of any medium; but, for me this day, it is the woodcut that holds the mysteries. Tomorrow may be different.

Another question concerns the long and tedious process of cutting and printing and whether it is worth it. I have mentioned the combination of activities in making a woodcut. It is this fitting together of activities to create a unity of forms that is symbolic of all life.

But the woodcut doesn't originate with the carving or with the preliminary drawing. It originates deep down in the unconscious mind of the artist and only becomes conscious as the person lives, looks, sees, and feels.

It can be likened in my current series of woodcuts to a search from above, from below, from within, and beyond. It can be likened to searching for lost treasures or for the end of the rainbow, for where some expectations are accomplished, others lie beyond our grasp.

Today the universe changes rapidly around us. Likewise, we are changing with it. We like to think of a natural order, in space, in our visible lives as human beings, and in that unconscious part of us that even self does not know. Centuries ago, Leonardo da Vinci said, "Nature is full of an infinity of operations which have never been part of experience."[1]

The scientist has shown to us through the microscope the heart of matter. Space exploration is bringing to us astounding knowledge of our universe. And this does not in any way dwarf the discoveries that man is making within himself. It should make man more cognizant of his existence as a moral being.

---

[1]Kenneth Clark, Landscape into Art (Boston: Beacon Press, 1949) p. 141.

Much of the human mind lies dormant. It is up to the artist to quicken a stimulus in this mind of man, to make known to him "a conscious reunion of their own inward reality with the reality of the world or of nature; or in the last resort, a new union of body and soul, matter and spirit."[2]

Art is an attempt to grasp a part of this time and space and present it in a formal statement. It is time and space as we know it, as we see it, and as we feel it. It is of yesterday, today, and tomorrow.

Forms in all space. A unity of all forms. That is what I imagine. That is what I desire to portray.

---

[2]Carl G. Jung, Man and His Symbols (Garden City, New York: Doubleday and Company, 1964) p. 268.

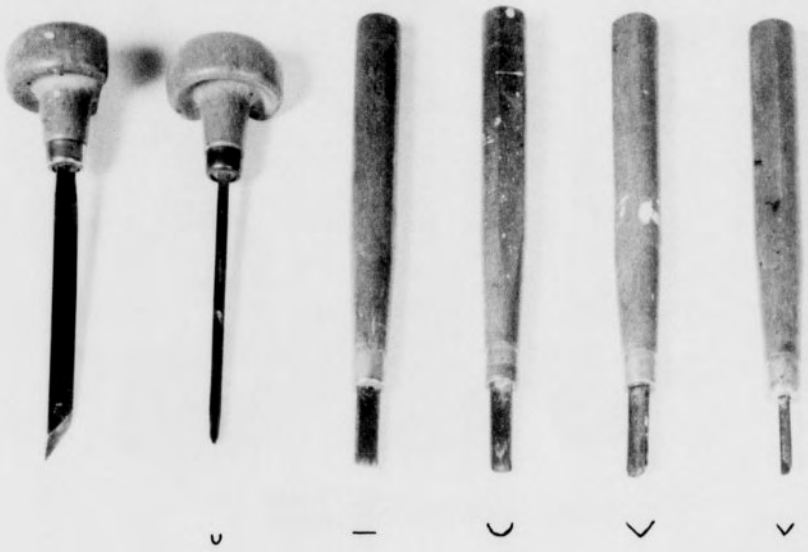

Figure 1. Cutting Tools Used in Making a Woodcut. Knife, Gouges, and Chisels.

Figure 2. Brushes Used to Apply Paint to Wood Block. a. Stencil Brush. b., c., and d. Japanese Brushes.

Figure 3. Applying Paint to the Wood Block with Japanese Brushes.

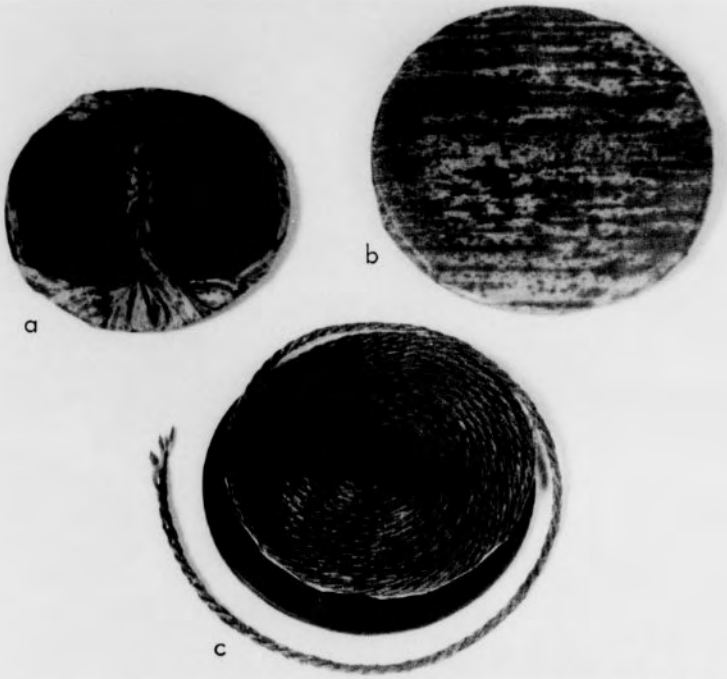

Figure 4. Japanese Baren Used in Printmaking. a. Back of Baren Showing Twisted Bamboo Handle. b. Front of Baren. c. Inside of Baren Showing Bamboo Coiled.

Figure 5. Method of Using Japanese Baren

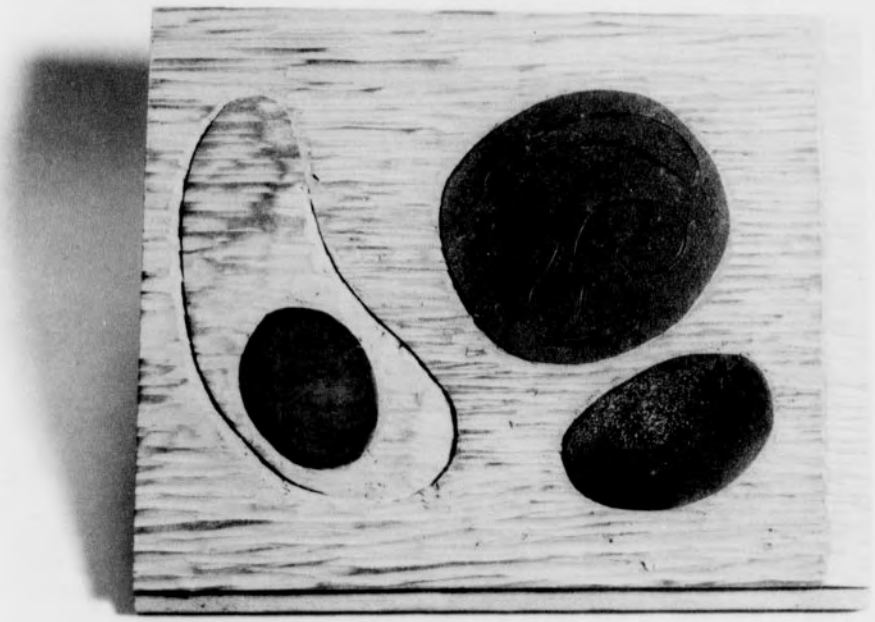

Figure 6. Wood Block Showing Use of Oil Base Ink Applied to Block to Produce Textural Effects.

BIBLIOGRAPHY

BIBLIOGRAPHY

Clark, Kenneth. Landscape into Art. Boston: Beacon Press, 1949.

Fujikake, Shizuya. Japanese Wood-block Prints. Tokyo: Japan Travel Bureau, 1957.

Jung, Carl G. Man and His Symbols. Garden City, New York: Doubleday and Company, 1964.

Platt, John. Colour Woodcuts. London: Sir Isaac Pitman and Sons, Ltd., 1948.

Statler, Oliver. Modern Japanese Prints. Rutland, Vermont and Tokyo, Japan: Charles E. Tuttle Company, 1956.

LIST OF WOODCUTS EXHIBITED

LIST OF WOODCUTS EXHIBITED

1. From Tyros
2. Space Islands
3. Ad Infinitum
4. Inconstant Moon
5. Space Progression
6. Circumlunar Amoeba
7. Life Forms in the Crater of Copernicus
8. Maelstrom
9. Worshippers of a Nearby Planet
10. Passers in the Night
11. Rendezvous in Space